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ABSTRACT

A multimethod model of educating gifted and talented students was based on graduate students' study of 14 eminent self actualized individuals. Common environmental elements of these individuals were found in parent background, birth order, relationship with family, education, task commitment, personality traits, and interests. The model was designed to include eight components: acceleration of content, experiential opportunities, prescriptive instruction, cultivation of reading, evolution of self direction, divergent-creative problem solving, investigations of real problems, and affective development. Affective development is built in through the use of bibliotherapy. Investigation of real problems is encouraged through resolving everyday problems with the counselor's guidance. Longitudinal evaluation is planned. (CL)

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How Programming Can Make A Difference for Gifted Students- A Multi-Methods Model

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In order to develop a new model for gifted education, one that is free from limitation, and comprehensive enough to contribute to the total development of gifted individuals K-12, it was decided that the focus should be upon the individual. What sort of gifted individual are we striving to produce? A quotation from the White House Conference on Education in 1970 said, "We ask first then, not what kind of education we want to provide, but what kind of human being we want to emerge. What would we have the twenty-first century man be?" This presentation explains the model that emerged out of this focus upon successful, eminent gifted persons.

First, the literature was reviewed for indications of what traits are characteristic of successful gifted persons. Terman in his volumn the Gifted Group at Mid Life (1959) found four traits characteristic of the most successful in adult life. They are: persistence in accomplishment of ends, integration toward goals, self-confidence, and freedom from inferiority feelings.

Another eminent psychologist, Abraham Maslow, termed outstanding creative production as "self-actualization" or understanding and accepting oneself and making the most of one's capacities. Therefore, it seems appropriate that an educational program be designed to develop a creative productive individual.

In the development of an educational model, methods of building self-esteem, task commitment, and creativity should be explored. Other models for gifted education deal with some of these and each has certain strengths, but do not concentrate upon the nurture of the total individual.

As the core of this new comprehensive model then, is the goal - a fully self-actualized, creative, independent, mentally healthy person. In order to determine some environmental factors that seem instrumental in bringing about self-actualization in people, biographies and autobiographies of persons deemed

to be self-actualized were studied. Commonalities that might serve as clues to environmental factors and enhancement of actualization were sought. If common elements in the environments of these successful persons are identified, then perhaps these experiences can be simulated in the educational realm to have a similar affect upon today's gifted students.

Graduate students in a class on teaching the gifted each chose eminent self-actualized individuals to study. No attempt was made to select a random sample of individuals or to set standards for selection except that biographical materials were available in order to study the person selected. The students made their own choices. (This is a limitation of the study.) However the individuals selected were compared to the studies of 700 eminent by Goertzel and Goertzel (1962, et al 1978) in terms of whether or not our sample of fourteen was representative of other individuals who have achieved success in various areas - sciences, business, literature and drama, etc., and was found to be typical of the 700 Goertzel and Goertzel studied.

Beginning with no preconceived ideas about what types of environmental factors to expect, the following categories emerged: parent background, birthorder, relationship with family, education, task commitment, personality traits, and interests. These elements were charted. (Figure 1). Fourteen persons were selected by the graduate students, they are Rachel Carson, Shirley Chisholm, Samuel Clemens, Walt Disney, Gandhi, George Maurier, Hiram Maxim, Margaret Mead, Golda Meier, Arthur Rubinstein, Beverly Sills, B.F. Skinner, Robindronath Tagore, and Ethel Waters. This group represents a wide variety of fields of endeavor from the arts, performing arts, science, politics and social science. The high number of women selected as eminent, six out of fourteen, assures us that the generalizations made are not just appropriate for gifted men. The chart of important elements was completed with information from the student reports. (Review Figure 1.)

Although the parent backgrounds were varied in occupation and interests, the family had a common characteristic of having a great respect and love for learning. Seven out of the fourteen individuals studied were first born and four more were the last born of large families. The family relationships were close and loving and many included an extended family. Families in general were characterized by a zest for living and inspiration from each other.

Most of the fourteen found formal education to be dull. Many did not have much formal education but were tutored, had mentors or apprenticeships, etc. Only five of the fourteen had formal college educations. The less formal experiences of mentors, playmates, grandparents and other adults in the person's life seemed more important than formal education. The eminent of this study were goal oriented, persistent, striving and had dreams of becoming. Their personality traits indicate independence and assertiveness as dominant traits of these persons. Their interests were reading, travel, and otherwise broadly focused within the same individual. Virtually all of the fourteen greatly enjoyed reading throughout their lives and at least eight of the fourteen specifically mention reading as a major interest.

Common elements of the environments that produced these highly successful, self-actualized individuals were similar to composite portraits of the Goertzel's studies (1962 et al 1978). For example, they noted that the eminent person is likely to be firstborn or only child in a middle class family. The homes provide many reading materials and parental expectations are high. These persons as children love learning but dislike school and teachers who try to confine them to a curriculum not designed for individual needs. They respond well to being tutored or left alone and they like special schools such as those who train actors, dancers, musicians, and artists . . . they are more self-directed, less motivated in wanting to please than are their peers or siblings. They need and

manage to find periods of isolation when they have freedom to think, to read, to write, to experiment, to paint, to play an instrument, or to explore the countryside. Sometimes this freedom can be obtained only by real or feigned illnesses; a sympathetic parent may respond to the child's need to have long free periods of concentrated effort. They treasure their uniqueness and find it hard to be conforming in dress, behavior, and other ways . . . (Goertzel's, 1978 pp 336-338).

Knowing the sort of environment that produced self-actualized adults, we now must determine how this environment can be simulated within the school setting in order to provide similar stimulation for individuals whether or not they have homes like our eminent individuals.

How can these components be adapted for the school environment? First then to substitute for parents who loved and respected learning and had a zest for life, we can provide teachers with these same characteristics. The category of place in family contributes information from studies on birth order Rothbart (1971) found that mothers of first borns had higher expectations and gave more technical explanations that they did for later borns.

Zojonc (1975) summarized studies of birth order and concluded that children who grow up surrounded by people with higher intellectual levels have a better chance to achieve their maximum intellectual powers than children who develop in intellectually impoverished milieus. Thus, children from large size families, who spend more time in a world of child-sized minds, should develop more slowly and therefore attain lower IQ's than children from small families who have more contacts with grown-up minds.

In school then an accelerated more demanding technical curriculum may provide the higher expectation or technical information such as first born's receive. (Figure 2, Acceleration of Content)

One of the main lessons learned from this study of famous persons was that

they tended to benefit more from less formal experiential type learning and settings than they did from formal education. In our substitute environment, more direct experiences in the community, work study, apprentice type learning is recommended. Also since individual interests were wide-spread, it is appropriate to provide a broader educational experience as well as less formal, more experiential.

These informal, broad influences upon the fourteen often involved adults besides parents - extended families. This provides us with additional support for supplying mentors and other adults outside of school to work with gifted students.

A common factor in the background of the fourteen eminent individuals was their love for reading during childhood. The reading component has been built into the Multi-Methods Model. The reading should be of broad based materials of free choice and accelerated in content, so that it is stimulating and challenging, includes great books as well as modern literature, science fiction, fantasy, and folk tales.

Home environments nurtured independence among the eminent so the Multi-Methods Model consciously develops independence among gifted and talented students through emphasis on self-direction. Techniques for building self-direction are incorporated in the model. Self-actualization is almost synonomous with creativity according to Maslow's definition, therefore creativity training was considered crutial to the educational model. Persons such as Gandhi and Chisholm were personally involved in politics, others had practical real life problem solving experiences as their major training, consequently a component for providing real life investigations of problems was included.

Affective education became a part of the model because of the importance attached to close family ties, the will to be different, and social reinforcement

for self-esteem building so that self-actualization can occur.

The Multi-Methods Model (Figure 2) then includes these components:

1. Acceleration of Content
2. Experiential Opportunities
3. Prescriptive Instruction
4. Cultivation of Reading
5. Evolution of Self-Direction
6. Divergent-Creative Problem Solving
7. Investigations of Real Problems
8. Affective Development

Field testing will be done through the Exploration Bay summer program in which pre-test and post-test for gains in self confidence and enhanced self-images will be given.

How does the summer program incorporate the model? First, acceleration is provided through advanced content of computer science and geology which is beyond the usual grade level curriculum. Affective development is built in through the reading for self-understanding component which uses the technique of bibliotherapy for helping students deal with problems. Bibliotherapy utilizes reading material to help solve emotional problems, build self-concept and promote mental health (Wolf, Penrod, 1980). It has a particular value for dealing with the gifted because so many of them also love reading. Therefore two segments of the model are incorporated in this student seminar through the technique of bibliotherapy. Through well-chosen books, gifted readers may increase self-knowledge and self-esteem, gain relief from unconscious conflicts, clarify values, and better understand other people. By identifying with characters in literature, gifted students may come to better understand themselves. Through reading of appropriate books students have the opportunity to discuss their

feelings about the book and relate it to their own lives.

The next segment of the model - divergent creative problem solving is taught through the choice sessions of creative dramatics, creative writing and problem solving. Evolution of self-direction occurs through the conscious effort of the staff to encourage decision-making and provision of opportunities for self-direction through the computer segment, and from the experience of living away from home for those students who reside on campus.

Investigations of real problems is encouraged through the guidance of the counselors in resolving everyday real life problems. In addition, students will gain some skills of a professional computer programer and geologist. Much of the program includes experiential field based opportunities through "hands-on" experiences with computers, field exploration, etc.

The last segment of prescriptive instruction is met through the small choice sessions which are tutorial in nature. Follow-up evaluation from the students and the results of the post-testing will provide us with some indications of how well the Multi-Methods Model develops self-esteem and improved attitudes toward learning. But only through follow-up of the students in about 20-30 years will we be able to assess whether or not these individuals become self-actualized. In any event the model seems appropriate for educating gifted youngsters. It incorporates the strengths of most, if not all, the other models for gifted education into one complete plan that can be used to educate the whole child K-12.

References

Baldanza, F. Mark Twain: an introduction and interpretation. New York: Barnes and Noble, Inc., 1961.

Cameron, G.R. Rose A biography of Rose Fitzgerald Kennedy. New York: C.P. Putnam's Sons., 1971.

Chakravary, A. A Tagore reader. Boston: Beacon Press, 1961.

Chisholm, S. Unbought and unbossed. Boston: Houghton Mifflin, 1970.

Goertzel, V. & Goertzel, M.G. Cradles of eminence. Boston: Little, Brown, 1962.

Goertzel, M.G., Goertzel, V. & Goertzel, T.G. 300 eminent personalities. San Francisco. Jossey-Bass, 1978.

Kaplan, J. Mr. Clemens and Mark Twain. New York: Simon & Schuster, 1966.

Kennedy, R.F. Times to remember. New York: Doubleday and Co., 1974.

Krishna K. Rabindronath Tagore a biography. New York: Grosse Press, Inc., 1962.

Ormand, L. George du Maurier. Pittsburgh: University of Pittsburgh Press, 1969.

Maslow, A. H. Motivation and personality. New York: Harper & Row, 1970.

Mann, P. Golda. New York: Coward, McCann and Geoghegn., 1971.

Maxim, H.P. A genius in the family. New York: Harper & Row, 1962.

Meed, M. Blackberry winter. New York: William Morrow and Co., 1972.

Nehru, H.K. Dear to behold. London: Macmillan, 1969.

Paine, A. The boys' life of Mark Twain. New York: Harper and Bros., 1944.

Rothbart, Mary K. Birth order and mother-child interaction in an achievement situation, Journal of Personality and Social Psychology, 1971, 17, 113-120.

Rubinstein, A. My younger years. New York: Knapf, 1973.

Sills, B. Bubbles. Indianapolis: Bobbs-Merrill, 1976.

Terman, L.M. The gifted group at mid-life: Thirty-five years' follow up of the superior child. Genetic studies of genius, vol. V. Stanford, Calif.: Stanford University Press, 1959.

Thomas, B. Walt Disney. N.Y.: Simon-Shuster, 1976.

Waters, E. His eye is on the sparrow. New York: Doubleday & Co., Inc., 1951.

Wolf, J. & Penrod D. Bibliotherapy: A classroom approach to sensitive problems. G/C/T, 1980, 15, 53-54.

Zojonc, Robert B. Dumber by the dozen. Psychology Today, Jan. 1975, 37-43.